

## Robotics Research Engineer – SLAM & ROS

**Job Title:** Robotics Research Engineer

**Reporting To:** Research Manager

**Deadline & Term:** ASAP, Permanent, Full Time

**Package:** Salary + Performance Related Pay + Options Scheme

**Location:** London (Wandsworth)

### The role:

Q-Bot is a high tech, high growth, international start-up, developing robotics and intelligent systems that will revolutionise the built environment. The company is now looking to hire a talented Research Engineer to join a rapidly growing, multidisciplinary product development team, in order to research and develop localisation, mapping and navigation capabilities for the company's robotics. The ideal candidate would have a good degree in Computer Science, Software Engineering, Robotics, Mechatronics or another relevant subject, combined with at least 3 years of experience developing robotics algorithms using C++, ROS, SLAM for a commercial application.

This is an excellent opportunity to get involved high growth company as it scales, work within a creative and dynamic team, with many opportunities for career progression. To make the most of this exciting opportunity Q-Bot is looking for someone who is ambitious, driven, passionate about robotics/AI, and who will be motivated by seeing their efforts have a real and lasting impact. The successful candidate will be rewarded with an exciting and diverse role, and influence to shape research and the long-term strategy of the company. Salary will depend on experience and the successful candidate will also be invited to take part in the Employee Share Option Plan or performance related pay.

### Duties of the job:

- Developing algorithms to perform mapping, state estimation, localisation, sensor fusion and ultimately autonomous navigation.
- Utilising state-of-the-art techniques in mapping / AI, improving existing algorithms where required, or alternatively developing new techniques.
- Performing tests, problem diagnosis, and debugging.
- Running experiments, analysing data and comparing results to theory.
- Researching a topic area, reporting and presenting back.
- Presenting and communicating ideas, including planning software development.
- Visiting customer sites and analysing products in situ.
- Project management of assigned projects/work packages.

### Essential requirements:

- A good degree in Computer Science, Software Engineering, Robotics or another relevant technical subject.
- A minimum of 3 years relevant experience developing commercial robotic systems.
- Fluent in C++ with experience of ROS, SLAM and / or other robotic systems.
- Able to plan time, manage assigned deliverables, and work to deadlines.
- Excellent written and verbal communication skills (English).
- Must be eligible to work in the UK without restriction.
- Able to work effectively both as part of a team and individually.

### Desirable skills:

- Application of Agile or other project management techniques.
- Experience with robot control systems, microcontrollers and electronics.
- Experience of deep learning and machine vision including computer vision libraries: OpenCV, PCL, etc.
- Experience with dynamical modelling of robotic systems and model-based controller design.
- Experience with unmanned ground vehicles or anthropomorphic robots.
- Shows initiative, motivated and goal oriented.

### About Q-Bot:

Q-Bot develops intelligent tools using robotics and AI that can inspect, monitor and maintain the health of our buildings and infrastructure. Q-Bot's mission is to transform the built environment with robotics and AI to become a global leader in construction innovation.

Initial research efforts developed a method of applying under floor insulation using a [robotic device](#) without the hassle and cost of traditional methods. As a result of this work Q-Bot has developed a number of exciting robotic and AI technologies which include robotic vehicles, digital manufacturing and 3D printing, control routines for autonomous localisation and navigation, 3D mapping of environments with automatic categorisation of features, as well as tools to manage the installation process and data collected. The solutions developed by Q-Bot have a number of [benefits](#):

- They empower operators, making them safer and more productive.
- They allow quicker and more effective execution of tasks.
- They create buildings that are energy efficient, cheaper to run, and much more comfortable.

The company has a growing team of over 25 employees in offices in London and Newcastle. Q-Bot is run by an experienced management team with an entrepreneurial track record, project management expertise and unique blend of robotics and building know how. The company's employees are a unique blend of engineers with Masters and PhDs in Science or Engineering and professionals with decades of practical experience in the construction sector.

Q-Bot is an equal opportunities employer and welcome applications from all suitably qualified persons regardless of their race, sex, disability, religion, belief, sexual orientation, or age.

**Please apply to:** [future@q-bot.co](mailto:future@q-bot.co) with a covering letter and CV. **Please note:** no recruitment agents, thank you.

